	This data management plan (DMP) is intended to provide guidance for data collection by field personnel and subsequent data management activities. The data collection and management practices presented in this plan are designed to ensure data integrity and consistency for all data collection personnel and from operational period to the next. This document is intended to be used in conjunction with the Region 8 Data Management Plan and only includes the details specific to the site.	**Site-Specific Data Management Plan**			
		Project Name:	Gold King Mine Site	**TDD Number/Site ID:**	0001/1508-04
		Author:	Jamie Miller	**Company:**	Weston Solutions
		Date Initiated:	August 17, 2015	**Last Updated:**	August 19, 2015
Reviewed by: Jan Christner			**Date: August 18, 2015**		

Data Processing

The following table outlines the specific requirements for various data types being collected during the project.

	Data Stream	Site Specific Procedure (Y/N)*	Required Information	Data Source	Site Specific Data Elements (Y/N)	QA Process	Data Repository	Reporting Task
1	Treatment Data	Y	*Daily Caustic volume, Daily Adit Discharge*	Log Book	Y	Field review	EPAOSC.org	Daily Report, Site Activities Report
2	Water Sampling Data	N	*Sampling information, Field parameters from water quality meter*	Log Book, Water Quality Meter, Scribe Mobile Application	N	Field review	Scribe.net	Daily Report, Site Activities Report
3	Water Monitoring Data	Y	*Water quality parameter collection for verification of treatment procedure*	Log Book, Water Quality Meter, Scribe Mobile Application	N	Field review	Scribe.net	Daily Report, Site Activities Report
4	Geospatial Data	N	*Verify sampling locations from historical sampling efforts, sampling locations, significant site features*	Basic GPS	N	Verify coordinates match with historic coordinates, verify locational and site feature accuracies.	Field Notes for verification on viewer.	Geospatial Viewer
5	Soil Sampling Data	N	*Sampling information*	Log Book, Scribe Mobile Application	N	Field review	Scribe.net	Daily Report, Site Activities Report
6	Soil Screening Data	N	*In situ XRF Screening results for decision making*	Log Book, Scribe Mobile Application	N	Field review	Scribe.net	Daily Report, Site Activities Report
7	Images	N	*Site photos*	Digital Camera	N	Field Personnel Review	EPAOSC.org	Daily Report, Site Activities Report
8	Site Documents	N	*SAP Addendum, HASP*	START PTL, Weston Network	N	PTL and OSC Reviews	EPAOSC.org	NA

9	Analytical Data	N	*Chain of Custody, Laboratory Data from a commercial laboratory, Results of XRF cup analysis*	Scribe, Laboratory EDD, XRF Validation Database	N	Review by field personnel prior to import to ensure all required fields are present and data maps accurately into Scribe database; data validation of lab results, validation of XRF results via Validation database	Scribe.net	Results Report, Geospatial Viewer
10	Construction Activities	Y	*Activity Type, Percentage complete, Planned Construction Activities*	Log Book	Y	Field review	EPAOSC.org	Daily Report, Site Activities report
11	Project Costs	N	*Field Costs, Personnel Hours*	RCMS database	N	PTL Review	1900 -1955 Forms	Email to OSC

* Y – indicates a site specific procedure is employed, N – indicates data management follows procedures outlined in the R8 DMP

Attachment A
Site Specific Data Elements and Valid Values

Ref. Project: Gold King Mine Site **TDD: 0001/1508-04** **Date: 8/19/15**

Data Stream	Data Element	Req	Description	Format	Scribe Table.Field	Valid Values* or Input Mask
All sampling and monitoring data	EventID	Yes	Identifier to distinguish between sampling events	Alphanumeric	Events.EventID	EventID should be the date of sampling or monitoring
	Location Zone	Yes	Used to differentiate Mine data vs Incident wide data	Alphanumeric	Location.LocationZone	GKMA
	Location Image Path		Used to differentiate R08 data in the incident wide combo subscription	Alphanumeric	Location.Location_Image_Path	R08
WaterSampling (Grab Samples, Flowrates)	Matrix	Yes	Water matrix	Valid Values/ Picklist	WaterSampling.Matrix	Surface Water
	Sample Number	Yes	Sample Identifier	Alphanumeric	WaterSampling.Samp_No	Sample IDs will correspond to historical Sample IDs. See attached table for valid values.
	Sample Location	Yes	Sample Location	Alphanumeric	WaterSampling.Location	Verify location via GPS with historical sampling location. If corresponding to historic water sampling location, utilize historical sample Location ID
SoilSampling	Matrix	Yes	Soil Matrix	ValidValues/ Picklist	SoilSampling.Matrix	Soil, Sediment
	Sample Number	Yes		Alphanumeric	SoilSampling.Samp_No	Sample IDs will correspond to historical Sample IDs, if applicable. See attached table for valid values.
	Sample Location	Yes	Sample Location	Alphanumeric	SoilSampling.Location	Verify location via GPS with historical sampling location. If corresponding to historic water sampling location, utilize historical sample Location ID
	Sample Depth From	Yes	Depth of sample collected (top of interval)	Number	SoilSampling.Depth	

	Sample Depth To	Yes	Depth of sample collected (bottom of interval)	Number	SoilSampling.DepthTo	
	Sample Depth Units	Yes	Units of sample depth	Picklist	SoilSampling.DepthUnits	Ft, in
SoilScreening	Monitoring Location	Yes	Location of in situ XRF screening	Alphanumeric	Monitoring.MonLocation	Verify location via GPS with historical sampling location. If corresponding to historic water sampling location, utilize historical sample Location ID
	Monitoring Parameter	Yes	Element	Alphanumeric	Monitoring.MonParameter	Arsenic, Lead, Zinc, etc.
	Monitoring Date	Yes	Monitoring Date	Mm/dd/yyyy	Monitoring.MonDate	
	Monitoring Time	Yes	Monitoring Time	Hh:mm	Monitoring.MonTime	
	Monitoring Measurement	Yes	Measurement	Number	Monitoring.MonMeas	XRF screening value
	Monitoring Units	Yes	Result Units	Alphanumeric	Monitoring.MonUnits	Mg/kg
Geospatial Data	Location	Yes	Coordinate	Alphanumeric	Location	Latitude, Longitude
Images	Metadata	Yes	Time/Date, Description	Alphanumeric	Time, Date, Description	Will be recorded in a photo log to document project, may be transcribed to EPAOSC.org
Construction Activities	Activity Type	Yes	Type of construction	Alphanumeric		Ex: Road construction, Adit excavation, Bulkhead installation
	Percentage Complete	Yes	Percentage of construction complete	Number		
	Planned Construction Activities	Yes	Planned construction activities and planned start date	Alphanumeric		

* Fill in additional site specific data elements/ valid values if identified in the field

Cement Creek Sample Locations

Sampling Location	Latitude	Longitude	Datum	Location Description
A68	**37.8112**	**-107.659**	**NAD83**	**Animas River upstream of the confluence with Cement Creek and Mineral Creek in Silverton. Sample at 14th Street gauge at 13th Street bridge**
A72	**37.79027**	**-107.668**	**NAD83**	**Animas River downstream of the confluence with Mineral Creek and downstream of Silverton. Animas Gauge below Silverton.**
ATS-1	37.89216	-107.649	NAD83	American Tunnel Seep #1. This is the largest seep near the American Tunnel drainage. It comes out
CC01C	**37.90992**	**-107.631**	**NAD83**	**Grand Mogul adit at toe of waste pile. Take flow measurements further downstream and just upstream**
CC01C1	37.90994	-107.631	NAD83	Grand Mogul north seep (stream right) at source. GPS provided by Sabrina.
CC01C2	37.91012	-107.633	NAD83	
CC01F	37.90934	-107.63	NAD83	Cement Creek upstream of Grand Mogul adit and tailings. Sample at start of steep uphill.
CC01H	37.91017	-107.633	NAD83	Cement Creek upstream of Queen Anne tributary but downstream of confluence with the Grand Mogul disc
CC01S	37.91023	-107.633	NAD83	Queen Anne tributary upstream of confluence with Cement Creek.
CC01T	37.91023	-107.634	NAD83	Cement Creek downstream of the Queen Anne tributary and upstream of confluence with Mogul Sublevel 1
CC01U	37.91074	-107.635	NAD83	Cement Creek downstream of the Sublevel 1 tributaries. Sample just upstream of the road crossing.
CC02A	37.91071	-107.634	NAD83	Mogul Sublevel 1 right drainage at base of tailings pile.
CC02D	**37.9098**	**-107.638**	**NAD83**	**Mogul Mine adit. Collect sample downstream of the mine pool at the 3-inch Parshall Flume.**
CC02E	37.90823	-107.638	NAD83	Gold Point Mine adit at portal. This is the first adit downstream of the Mogul Mine that flows out of the ground up the hill on the right side of the hill heading to Mogul.
CC02H	37.91069	-107.634	NAD83	Mogul Sublevel 1 left drainage at base of tailings pile.
CC02i	37.91067	-107.634	NAD83	Combined flow of the Mogul Sublevel 1 drainages just upstream of the confluence with Cement Creek.
CC02J	37.90928	-107.638	NAD83	Plugged adit with pipe located between Mogul and Gold Point; historically dry; however it was flowin
CC02K	37.9075	-107.64	NAD83	Pride of Bonita adit at portal. Open draining adit just uphill from the road that is accessed near a rock outcropping. Just downstream of CC02E.
CC03	**37.89554**	**-107.647**	**NAD83**	**Cement Creek downstream of the Red and Bonita confluence and upstream of the North Fork confluence.**
CC03A	37.90835	-107.642	NAD83	
CC03B	37.89778	-107.646	NAD83	Cement Creek immediately upstream of Red and Bonita confluence. Site is straight across from a powe
CC03C	**37.8972**	**-107.644**	**NAD83**	**Red and Bonita mine adit at the portal. Do not take flow measurements at this site.**
CC03D	**37.8968**	**-107.645**	**NAD83**	**Red and Bonita mine adit downstream of the tailings pile. Collect sample at culvert that goes under County Road.**
CC03E	37.89741	-107.646	NAD83	**Red and Bonita inflow to Cement Creek**
CC04	**37.89412**	**-107.638**	**NAD83**	**North Fork of Cement Creek just upstream of confluence with the 7-Level mine adit. Sample upstream of County Road.**
CC05				**Cement Creek just downstream of confluence with North Fork**
CC06	**37.8946**	**-107.638**	**NAD83**	**7-Level mine adit upstream of the confluence with the North Fork of Cement Creek. East adit flume**
CC06B	**37.89473**	**-107.639**	**NAD83**	**Second portal at the Gold King 7-level mine. West adit flume beside the power pole.**

CC07	**37.8951**	**-107.647**	**NAD83**	**North Fork of Cement Creek upstream of confluence with Cement Creek immediately upstream of County Road**
CC14	**37.87673**	**-107.644**	**NAD83**	**Silver Ledge Mine discharge**
CC15	37.87618	-107.645	NAD83	**South Fork upstream of Silver Ledge Mine discharge**
CC16B	37.87681	-107.646	NAD83	**South Fork downstream of Silver Ledge mine discharge and tailings pile**
CC17	37.8894	-107.651	NAD83	South Fork above confluence with Cement Creek
CC18	**37.89127**	**-107.649**	**NAD83**	**Cement Creek upstream of South Fork but downstream of American Tunnel confluence. Sample upstream o**
CC18B	**37.89423**	**-107.647**	**NAD83**	**Cement Creek upstream of the American Tunnel confluence but downstream of the North Fork. Park at C**
CC19	**37.89098**	**-107.648**	**NAD83**	**American Tunnel mine adit. Sample where flow comes out of the ground.**
CC19C	37.89201	-107.649	NAD83	**Largest seep from American tunnel**
CC20				**Cement Creek below former treatment plant inflow**
CC21	**37.88946**	**-107.654**	**NAD83**	**Cement Creek downstream of South Fork**
CC21B	37.88252	-107.667	NAD83	
CC26	37.88264	-107.668	NAD83	
CC28C	37.87823	-107.67	NAD83	
CC30				
CC30N	37.87132	-107.674	NAD83	
CC34	37.8633	-107.675	NAD83	
CC38				
CC38C				
CC40	37.8522	-107.678	NAD83	
CC40B	37.85277	-107.676	NAD83	
CC41	37.85148	-107.676	NAD83	
CC42	37.8506	-107.676	NAD83	
CC44B	37.84668	-107.678	NAD83	
CC45K	37.8403	-107.679	NAD83	
CC46B	37.83791	-107.679	NAD83	
CC47C	37.82647	-107.669	NAD83	
CC48	**37.82**	**-107.663**	**NAD83**	**Cement Creek upstream of Silverton and upstream of confluence with the Animas River. From town, hea**
CC49	37.80964	-107.661	NAD83	Cement Creek at mouth
Cement Creek 14th St Bridge				